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ABSTRACT

As part of a symposium on "A Plan for the Comprehensive Evaluation of College Teaching," this paper focuses on the third of three suggested levels of an evaluation matrix, specific feedback data aimed at pinpointing reasons for and solving problems with teaching and classroom activities. Methods of getting specific feedback data from students and colleagues and of providing assistance to improve instruction are examined. Such data are usually collected to calrify and explicate problems identified by Level 2 evaluation. Student input to Level 3 evaluation may take several forms. For instance, if lectures were reviewed negatively at Level 2, an open-ended questionnaire about the lectures could be developed and used. Alternatively, the faculty member could engage in discussions with his students concerning improvement of the lectures. The important contributions to Level 3 evaluation which colleagues and evaluation specialists can make are examined. (Author/KM)

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ANALYZING AND IMPROVING INSTRUCTIONAL PRACTICES

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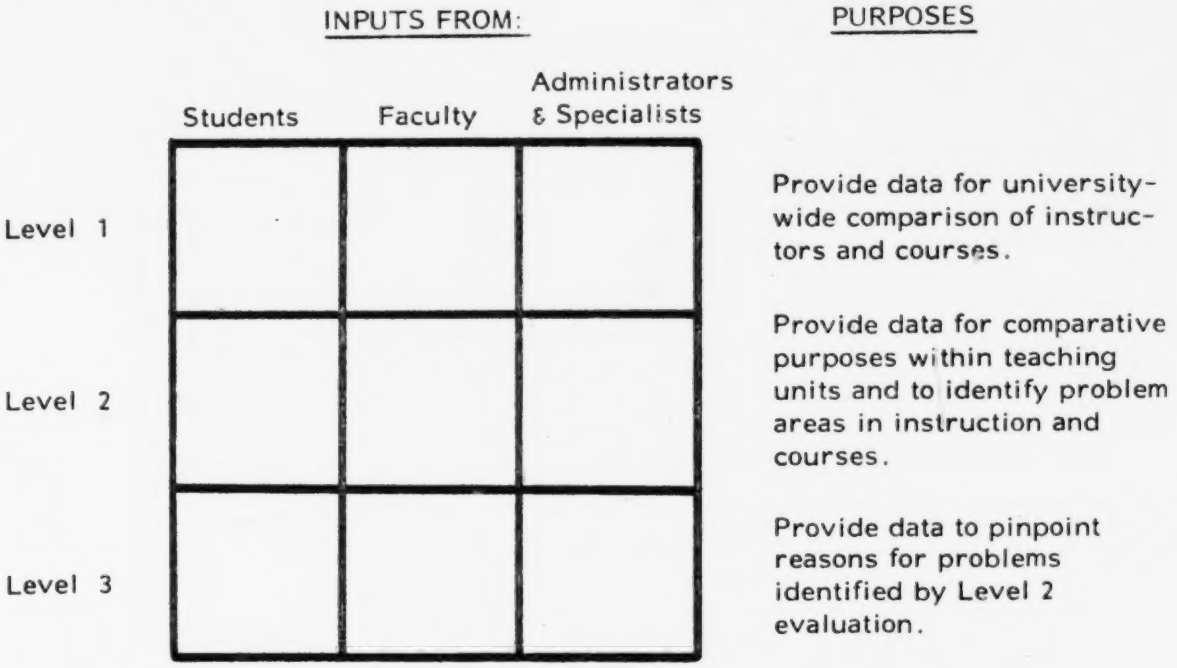
Paper presented at the AERA symposium, "A Plan for the Comprehensive Evaluation of College Teaching" on February 27, 1973, in New Orleans.

SYMPOSIUM OVERVIEW

The purpose of this symposium on the topic, "A Plan for the Comprehensive Evaluation of College Teaching," was to present and discuss a 3x3 matrix of inputs and techniques that could be used as a plan for the evaluation and improvement of college teaching. A schema of the matrix would look something like this:


INPUTS FROM:
PURPOSES
Students
Faculty
Administrators & Specialists
Level 1
Level 2
Level 3
Provide data for university-wide comparison of instructors and courses.
Provide data for comparative purposes within teaching units and to identify problem areas in instruction and courses.
Provide data to pinpoint reasons for problems identified by Level 2 evaluation.

The details of the plan were presented in papers by the six participants. An overview was provided by H. Richard Smock and Terence J. Crooks in "A Plan for the Comprehensive Evaluation of College Teaching." Gerald Gillmore discussed a method to gather valid and reliable data at Level 1 in "Evaluation by Students for

University-Wide Comparative Purposes." Level 2 was covered by Barak Rosenshine in "Faculty and Administrative Inputs to Instructional Evaluation" and Lawrence Aleamoni in "Evaluation by Students to Identify General Instructional Problems." Level 3 inputs were described by Keith Wharton in "Analyzing and Improving Instructional Practices." The overall approach was discussed by Wilbert J. McKeachie and G.H. Roid.

ANALYZING AND IMPROVING INSTRUCTIONAL PRACTICES

Introduction

The keys to the improvement of instructional practices in American colleges and universities are solidly in the hands of individual teachers. Administrators may urge improvement, colleagues may support improvement, students may demand improvement, but until the teacher in the classroom decides to act, nothing will happen. And these teachers are extremely busy people. Not only do they have classes to teach -- which means lectures to prepare, demonstrations and laboratories to arrange, examinations to construct and grade, etc. -- they also have students to advise, committees to serve on, research to do, and papers and books to write. They read a great deal, travel a lot, and tend to become actively involved in a number of social and community activities.

I call attention to the obvious only because of the implications that follow for those of us who advocate evaluation of instruction for improvement of instruction. We must remember that the programs we design and the procedures we recommend are for people who have very little time to devote to them. In some ideal world we might expect all teachers to give top priority to evaluation schemes that include detailed diagnoses of problems and recommendations for solutions (many of which of necessity would require teachers to go somewhere and participate in some activity, e.g., a series of workshops on the preparation of instructional objectives) that no doubt would improve their teaching. In our real world, however, we must realize that such schemes, which should be developed and made available to all teachers, will be utilized by only a few, and even these few may not consider them the most important activities in their lives.

With these thoughts in mind, I will attempt to complete the remaining cells of the 3 x 3 evaluation matrix described by Richard Smock and Terence Crooks. This third level of the matrix will focus on methods of getting specific feedback data from students and colleagues and on suggestions for providing assistance to improve instruction. It is assumed that the individual teacher for whom these procedures are recommended: 1) has utilized Level 2 evaluations to secure inputs from students and colleagues to identify general areas in courses and instruction in which improvement is needed, and 2) sincerely wishes to use these inputs to improve instruction and is willing to devote at least a minimal amount of time and effort to doing so.

Student Input

Instruction, in modern institutions of higher education, occurs in a variety of ways under a multitude of conditions. There are large lecture sessions, small group discussions, closed-circuit television presentations, laboratory experiments, rigidly-prescribed activities, independent study contracts, and almost endless combinations of these options plus many others as well. No one course or instructor could ever utilize all of the possible approaches to teaching, obviously, but most use more than one. This means that any teacher who wishes to use student input to evaluate and improve instruction must be prepared to secure these inputs about each facet of the teaching-learning situation. And since courses, students, and teachers change from term to term, whatever means are developed to gather these inputs cannot be "permanent," but must be made flexible and open enough to apply to the altered situations.

The task is not as difficult as it may appear at first glance, however. The Level 2 evaluation will have identified the area or areas of instruction in need of improvement. Such things as organization of the course material, communication and interaction skills of the instructor, examination and evaluation procedures, or amount and difficulty of required work may have been included. The teacher's responsibility at Level 3 is now to follow up this preliminary diagnosis with procedures and questions designed to uncover the specific problems, and to determine what can be done to bring about improvement. Four guidelines for accomplishing this are offered:

1. The opportunity to provide input for Level 3 evaluations should be made available to each student, but input should not be required from any. Although Level 2 evaluations may have identified the areas in which students in a class are dissatisfied and would like to see improvement, it is unlikely that every student is having difficulty with every problem area identified. It does not seem wise, therefore, to attempt to force a response from students who really have no complaint. The results of such an effort might yield data that would only obscure the actual problem.
2. Input from students should be solicited only in those areas in which change is possible. There is no need to further frustrate students by asking them to offer suggestions about situations which can not or will not be altered. If realities dictate, for example, that a course be taught by closed-circuit television and Level 2 evaluations

show that the students are not pleased with this method, there is no need to ask students at Level 3 if they would prefer small-group discussions. A more profitable alternative would be to try to locate specific shortcomings of the televised presentations and attempt to correct them.

3. The data-gathering instruments used should be simple, easy to administer, and require only a small amount of class time to complete. Teaching and learning are the main ingredients of a class, and an inordinate amount of time and effort devoted to complex evaluation of instruction procedures seems completely unjustifiable.
4. Whenever possible, follow-up procedures should provide for discussions between teacher and students. Questionnaires can uncover some problems, but others can be ferreted out only in person-to-person conversations.

The incorporation of these guidelines into procedures for securing student input into Level 3 evaluation is a fairly straightforward process: the students must be asked direct questions about the areas of instruction identified as in need of improvement. The exact method used will depend upon a number of factors -- the personality of the teacher, the number of students in the class, the nature of the course, etc. -- but the matter must be taken to the students in every instance. Perhaps two examples illustrating how this may be done will be helpful.

Suppose, for instance, that a teacher of Beginning Spanish (30 students in a class) learns from the Level 2 evaluations that her students are dissatisfied with the

oral drills that are a part of every class period. If she has established sufficient rapport with at least some of the students in the class, all that might be needed to uncover the specific complaints is a brief discussion of the drills with a few of these students. This could take place informally outside of class hours. If she wishes to give every student an opportunity to respond formally, she might prepare a brief, open-ended questionnaire about the oral drills and use the last five or ten minutes of a class period to administer it. The questionnaire could look something like this:

(See Appendix 1)

A combination of these two approaches can be used quite effectively in large classes such as an introductory course in Sociology. A short questionnaire, similar to the one just mentioned, can be used to gather specific feedback data from the students about the area of instruction in question. The results can then be discussed by the teacher with a volunteer committee of students from the class. In this way every student -- even in a class of 250 students -- will have a chance to express his criticisms and offer suggestions for improvement, and the teacher will be able to "go beyond the data" through the open discussions.

Colleague Input

A teacher's colleagues can play an important role in Level 3 evaluation if the teacher seeking help is careful not to "wear out his welcome." It would, no doubt, be expecting too much to ask a fellow faculty member who had assisted a teacher at Level 2 by reviewing and commenting upon course outlines, objectives, assignments, examinations, etc., to now sit through every one of the teacher's class sessions for a term and identify each weakness observed in lecturing. It does not seem unreasonable,

however, to ask this colleague to visit the class for twenty minutes some day while the teacher is conducting a class activity that has been identified at Level 2 as needing improvement, and later commenting upon what was noticed.

To continue one of the examples given earlier, the Spanish teacher having difficulty with oral drills could invite one of her colleagues to observe the oral drill portion of her class. Before the visit, however, the colleague should receive a description of the procedures that are customarily followed in the drills and a statement of what the teacher hopes to accomplish by them. (An example is given in Appendix 2.) This will enable that person to develop criteria against which to compare and evaluate what is actually observed. (See example in Appendix 3.) During the visit, the observer might note that the teacher is calling on only the students who can readily respond, and quickly skips over or ignores those having difficulty (when the drills were intended to give every student practice in answering and asking questions); or is habitually "speaking to the chalkboard," making it difficult for the students to hear what is said; or any number of things that might help pinpoint the specific problems. A subsequent discussion of the observations could enable the Spanish teacher to make corrections that would convert the oral drills into one of the high points of the class for her students.

There are any number of ways that colleagues can provide input into Level 3 evaluations. Class visitations are only one. Probably one of the most profitable is simply a frank discussion of the particular activity in question with others who also are interested in improving their teaching. The arrangements for such discussions can be simplified if an entire department or a significant number of teachers from a department participates in the three-level evaluation plan that is being proposed

at this symposium. If this is done, it is quite probable that Level 2 evaluations will uncover problem areas that are common to several teachers. These teachers could then work together, with the aid of specialists, where needed, to identify the specific difficulties that each is having and find solutions that are acceptable to each individual.

There are two key factors to be kept in mind when requesting colleague aid with Level 3 evaluations: 1) the request should be for a small amount of time, and 2) it should call for help with a specified area of concern. Sending one's entire package of course objectives, lecture notes, examinations, and a course syllabus to a teaching friend with the request to "Let me know if you see anything wrong." is not likely to yield useable results.

Specialist Input

Specialist input into evaluation of instruction is most often thought of as occuring at what we have identified here as Level 1 and Level 2 evaluations. (By "specialists" I am referring to those persons in service organizations within colleges and universities whose primary mission is to provide support and special services for the faculty of the institution. This includes such organizations as offices of institutional research, measurement and evaluation services centers, instructional resources centers, etc.) And indeed it would be impossible to mount university-wide evaluation efforts such as the program at the University of Illinois without the assistance of these persons and their organizations.

Their services, however, in order to encourage improvement and effect change in instructional practices, should extend into Level 3 as well, for they possess expertise in solving instructional problems not found in the faculty at large. How

many faculty members, for instance, have been taught how to perform or use the results of an item analysis, or write measurable instructional objectives? How many have studied theories of learning or motivation? The answer, of course, is "Not very many" and no one is at all suprised, for these topics are seldom part of a graduate program except in Education or Psychology. Yet significant numbers of these teachers will learn from Level 2-type evaluations that tests, course objectives, and course organization to capture and maintain student interest and maximize learning are the areas in which improvement is most sorely needed.

If the instructional specialists do not step in at this point, use their special skills to help the teacher identify specific instructional problems, and then assist in finding solutions to the problems, the entire evaluation effort is in great danger of becoming only an exercise in futility. The situation might be roughly analogous to that of a person who is repeatedly told by his physician that he is sick, but is never told what the exact problem is or what he can do to get well.

How can instructional specialists assist in Level 3 evaluation? The answer is simple to give, yet often very difficult to accomplish: take their services to the individual teacher. The specialist who sits in his office and waits for the faculty to come to him will have a long, lonely wait. As was mentioned at the beginning of this paper, teachers are busy people. Even the best-intentioned will find so many demands on their time that they will not be able to seek out the help that they need. It must be brought to them.

Some general suggestions and a few examples as to how this may be done are given below:

1. The faculty must be informed as to what services are available to them. Every institution has a number of service organizations, yet frequently no concentrated effort is made to advertise their existence. Merely listing them in the Student-Staff Directory is certainly not enough. One good way to accomplish this is to prepare a guide to the services available and send each faculty member a copy. An example is the booklet, "Instructional Resources," prepared by the Center for Educational Development at the University of Minnesota. A copy of this booklet was mailed to each faculty member on the Twin Cities Campus in the fall of 1972. (Copy attached)

   The guide can be supplemented by periodic "special notices" from individual organizations who wish to call faculty attention to changes in services offered, programs of special interest, etc.

2. Some unit central to the Level 2 evaluation program should compile a listing of those areas of instruction most frequently identified as in need of improvement. If it can be done without violating the confidentiality of the data, this same unit should also compile the names of the teachers having common problems. This compilation could be done at the institutional level by a measurement services center, or at the collegial or departmental level by some administrative or faculty person or organization.

   The information gathered should be made available to the appropriate service organizations to enable them to plan and coordinate efforts to provide the proper assistance where most needed. The result could

be such activities as a mailing of "Testing Tips" from an evaluation services office to teachers having problems with testing, or the scheduling of a short seminar on discussion techniques led by a member of the Communications faculty for teachers having difficulty in leading seminars.

3. Instructional specialists should attempt to "work themselves out of a job" by imparting their skills to certain members of the teaching faculty and then letting these teachers provide "specialist" help to their colleagues. In almost every department there are individuals who take a special interest in instructional improvement. They learn about and try alternative approaches to teaching, they participate in workshops and seminars on instruction, and they indicate in various other ways that teaching and its improvement is of major importance to them. These teachers must be made an integral part of any instructional improvement scheme, for there simply are not enough specialists to reach every member of the faculty of an institution and give them the individual attention that is needed. Specialists can, however, concentrate their efforts on these "key" people in the departments, teach them the skills that are needed, and then trust them to assist their fellows.

A program using this approach was being planned (and is probably in operation at this time) by the Centre for Learning and Development at McGill University. A small number of teachers were to be invited to take part in an intensive program on the evaluation of student

learning sponsored by the Centre. One requirement for participation in the program, however, was that each participant had to agree to pass along what he had learned to a fellow member of his department. In this way the evaluation services and expertise of the Centre were to be spread to many faculty members, and a number of departments were to acquire their own "in-house" expert on evaluation.

Summary

This paper on the third level of a three-level plan for the comprehensive evaluation of college teaching has explored several approaches to securing student and colleague input into the identification and solution of specific instructional problems. It has also dealt briefly with some of the ways specialists can aid in the instructional improvement efforts of individual teachers. It was emphasized that teachers, who ultimately determine whether or not teaching will improve, have very little time to devote to formal instructional improvement activities and programs. Any scheme, therefore, for the evaluation and improvement of teaching must take this fact into consideration and be designed so that services are brought to the teacher rather than requiring that the teacher devote any significant amount of time to seeking them out.

Appendix 1

Spanish 1-102
Section 4
February 14, 1973

The results of the Student Reactions to Instruction survey that you completed last week showed that improvement is needed in our oral drills. Please help me pinpoint the problem. Be as specific as you can.

1. What problems are you having with the oral drills?

2. What can be done to correct these problems?

Thanks ---

Juana Grimes

Appendix 2

February 16, 1973

Dear John:

Thanks for agreeing to help me find the causes for the troubles I'm having with the oral drills. I'll list below what we customarily do in the drills and what I hope to accomplish by them. This should help you know what to expect when you visit the class next Thursday.

Purpose of Drills

The purpose of the drills is to give every student in the class an opportunity to both hear and speak Spanish. They are conducted at normal speaking speed, and I want the students to respond correctly without hesitation.

Class Procedures

1. The students will have been assigned a short basic dialogue, paragraph or reading selection to study.

2. I will begin by reviewing the assignment and answering any questions about new materials.

3. I will then ask a student a question based on the assignment. I expect a complete answer, not just a single-word reply.

4. I will proceed by asking another question of some other student, or by asking the first student to direct a question to one of his classmates.

5. This basic pattern will be repreated throughout the drills. At the end I will summarize and again answer any questions the students have.

Juana

Appendix 3

Check-list For Class Visit

1. Were students given an assignment to study? _____

2. Did teacher review assignment and answer questions? _____

3. Did teacher use normal speaking speed? _____

4. Did teacher speak clearly and loudly enough to be heard? _____

5. Did every student have an opportunity to both answer and ask at least one question? _____

6. Were responses given without hesitation and as a complete reply? _____

7. Did teacher summarize and answer questions at the conclusion of the oral drills? _____

8. Comments: